10/622898

Cofe

Attorney Docket No.: 337348059US

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on:

Date: Feb. 27, 2006 By: Stefan P Klinkowski
Stefan P. Klinkowski

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF:	BRADFORD EVAN GLINER *et al.*	EXAMINER:	CARL LAYNO
PATENT NO.:	6,959,215	ART UNIT:	3762
ISSUED:	OCTOBER 25, 2005	CONF. NO.:	2827

FOR: **METHODS FOR TREATING ESSENTIAL TREMOR**

Request for Certificate of Correction under 37 C.F.R. §1.322 or §1.323

Certificate of Corrections Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

1. The applicant(s) requests a Certificate of Correction to correct errors in the above-identified patent, which are listed on the enclosed Form PTO/SB/44. In addition, the applicant respectfully provides copies of the Amendment filed on March 22, 2005, and subsequent Notice of Allowance dated June 2, 2005 that support the applicants request for a Certificate of Correction.

2. Any errors on the part of the applicant are of a clerical or typographical nature or are otherwise minor in character. None of the requested corrections would constitute new matter or require reexamination of the patent.

3. Source of Error(s) and Payment of Fee:

   ☒ All of the errors listed on Form PTO/SB/44 are believed to be due to mistake on the part of the USPTO (37 C.F.R. §1.322). Accordingly, no fees are believed to be due.

   ☐ At least one of the errors occurred due to applicant's mistake made in good faith (37 C.F.R. §1.323).

   ☐ A check covering the fee under 37 C.F.R. §1.20(a) ($100.00) is enclosed herewith.

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☐ Please charge the fee under 37 C.F.R. §1.20(a) to Deposit Account No. 50-0665. This paper is provided in triplicate.

☒ Please charge any underpayment necessary for consideration of this paper to Deposit Account No. 50-0665.

4. Please send the Certificate of Correction to the undersigned at the address shown below.

Respectfully submitted,
Perkins Coie LLP

Date: Feb. 27, 2006

John M. Wechkin
Registration No. 42,216

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Customer No. 25096
Perkins Coie LLP
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Seattle, Washington 98111-1247
(206) 359-8000

MAR 7 2006

PTO/SB/ 44 (02-01)
Approved for use through 01/31/2004. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO : 6,959,215

DATED : October 25, 2005

INVENTOR(S) : Bradford Evan Gliner et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Front Page
"43 Claims, 9 Drawing Sheets" should be --48 Claims, 9 Drawing Sheets"--;

The following Amendments to the Claims were made in an Amendment filed March 22, 2005, and allowed by the Examiner in the Notice of Allowance dated June 2, 2005:

Please cancel claim 1 and add new claims 51-56, as amended:

1. (Cancelled)

51. (New) The method of claim 15 wherein the information includes second information and wherein applying an electrical stimulation at least proximate to a stimulation site includes applying an electrical stimulation to a stimulation site having a location based on a comparison of the second information with first information, the first information corresponding to a level of neural activity in the patient's brain while the patient does not perform the muscle action.

52. (New) The method of claim 15 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having a frequency of from about 5 Hz to about 200 Hz.

53. (New) The method of claim 15 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having an electrical potential of from about 0.25 volts to about 5.0 volts.

54. (New) The method of claim 17 wherein the information includes second information and wherein applying an electrical stimulation at least proximate to a stimulation site includes applying an electrical stimulation to a stimulation site having a location based on a comparison of the second information with first information, the first information corresponding to a level of neural activity in the patient's brain while the patient does not perform the muscle action.

55. (New) The method of claim 17 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having a frequency of from about 5 Hz to about 200 Hz.

56. (New) The method of claim 17 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having an electrical potential of from about 0.25 volts to about 5.0 volts.

MAILING ADDRESS OF SENDER: Perkins Coie LLP
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Seattle, WA 98111-1247

PATENT NO. 6,959,215

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Approved for use through 01/31/2004. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

UNITED STATES PATENT AND TRADEMARK OFFICE

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1. (Cancelled)

51. (New) The method of claim 15 wherein the information includes second information and wherein applying an electrical stimulation at least proximate to a stimulation site includes applying an electrical stimulation to a stimulation site having a location based on a comparison of the second information with first information, the first information corresponding to a level of neural activity in the patient's brain while the patient does not perform the muscle action.

52. (New) The method of claim 15 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having a frequency of from about 5 Hz to about 200 Hz.

53. (New) The method of claim 15 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having an electrical potential of from about 0.25 volts to about 5.0 volts.

54. (New) The method of claim 17 wherein the information includes second information and wherein applying an electrical stimulation at least proximate to a stimulation site includes applying an electrical stimulation to a stimulation site having a location based on a comparison of the second information with first information, the first information corresponding to a level of neural activity in the patient's brain while the patient does not perform the muscle action.

55. (New) The method of claim 17 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having a frequency of from about 5 Hz to about 200 Hz.

56. (New) The method of claim 17 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having an electrical potential of from about 0.25 volts to about 5.0 volts.

MAILING ADDRESS OF SENDER: Perkins Coie LLP
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PO Box 1247
Seattle, WA 98111-1247

PATENT NO. 6,959,215

No. of additional copies

1

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03-24-05

JFW

Attorney Docket No. 33734-8059US

Express Mail Label EV622661894US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: BRADFORD EVAN GLINER ET *AL.*	EXAMINER: C.H. LAYNO
APPLICATION NO.: 10/622,898	ART UNIT: 3762
FILED: JULY 17, 2003	CONF. NO: 2827
FOR: **METHODS FOR TREATING ESSENTIAL TREMOR**	

Amendment Under 37 C.F.R. § 1.111

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The present communication responds to the Office Action dated December 28, 2004 in the above-identified application. Please amend the application as follows:

Amendments to the Claims are reflected in the listing of claims beginning on page 2.

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Amendments to the Claims:

Please cancel claim 2 without prejudice to pursuing this claim in a continuation or other application. Please add new claims 51-56. Following is a complete listing of the claims pending in the application, as amended:

1. (Cancelled)

2. (Cancelled)

3. (Previously Presented) A method for treating essential tremor, comprising:

directing a patient to perform a muscle action;

directing a computer-based routine to collect information corresponding to a level of neural activity in the patient's brain while the patient performs the muscle action; and

at least reducing an essential tremor motion of the patient by applying an electrical stimulation at least proximate to a stimulation site, the location of the stimulation site being based at least in part on the information.

4-5. (Cancelled)

6. (Previously Presented) A method for treating essential tremor, comprising:

directing a patient to perform a muscle action;

directing information to be collected on blood oxygen levels in the brain, the information corresponding to a level of neural activity in the patient's brain while the patient performs the muscle action; and

at least reducing an essential tremor motion of the patient by applying an electrical stimulation at least proximate to a stimulation site, the location of the stimulation site being based at least in part on the information.

7. (Previously Presented) A method for treating essential tremor, comprising:

directing a patient to perform a muscle action;

directing information to be collected, the information corresponding to a level of neural activity in the patient's brain while the patient performs the muscle action;

locating a stimulation site based at least in part on the information and positioned relative to an anatomical feature of the patient; and

at least reducing an essential tremor motion of the patient by applying an electrical stimulation at least proximate to the stimulation site.

8. (Previously Presented) A method for treating essential tremor, comprising:

directing a patient to perform a muscle action;

directing information to be collected, the information corresponding to a level of neural activity in the patient's brain while the patient performs the muscle action;

locating a stimulation site based at least in part on the information relative to a fiducial having a fixed location relative to the patient's skull; and

at least reducing an essential tremor motion of the patient by applying an electrical stimulation at least proximate to the stimulation site.

9. (Cancelled)

10. (Previously Presented) A method for treating essential tremor, comprising:

directing a patient to perform a muscle action a first time;

directing first information to be collected, the first information corresponding to a level of neural activity in the patient's brain while the patient performs the muscle action the first time;

affecting the patient's motor nerves by introducing a drug into the patient's body;

directing second information to be collected while the patient performs the muscle action a second time and while the patient is under the influence of the drug;

directing a comparison of the first information with the second information to identify a stimulation site of the brain; and

at least reducing an essential tremor motion of the patient by applying an electrical stimulation at least proximate to the stimulation site.

11. (Previously Presented) A method for treating essential tremor, comprising:

directing a patient to perform a muscle action;

directing information to be collected, the information corresponding to a level of neural activity in the patient's brain while the patient performs the muscle action; and

at least reducing an essential tremor motion of the patient by administering drugs to the patient and applying an electrical stimulation at least proximate to a stimulation site, the location of the stimulation site being based at least in part on the information.

12. (Cancelled)

13. (Previously Presented) A method for treating essential tremor, comprising:

directing a patient to perform a muscle action;

directing information to be collected, the information corresponding to a level of neural activity in the patient's brain while the patient performs the muscle action; and

at least reducing an essential tremor motion of the patient by applying an electrical stimulation at least proximate to a stimulation site, the location of the stimulation site being based at least in part on the information, the electrical stimulation including a varying electrical stimulation signal having an electrical potential of from about 0.25 volts to about 5.0 volts.

14. (Cancelled)

15. (Previously Presented) A method for treating essential tremor, comprising:

directing a patient to perform a muscle action that includes maintaining a muscle in a particular position;

directing information to be collected, the information corresponding to a level of neural activity in the patient's brain while the patient performs the muscle action; and

at least reducing an essential tremor motion of the patient by applying an electrical stimulation at least proximate to a stimulation site, the location of the stimulation site being based at least in part on the information.

16. (Cancelled)

17. (Previously Presented) A method for treating essential tremor, comprising:

obtaining first information corresponding to a level of neural activity in the patient's brain while the patient does not perform a muscle action;

directing a patient to perform the muscle action;

directing second information to be collected, the second information corresponding to a level of neural activity in the patient's brain while the patient performs the muscle action; and

at least reducing an essential tremor motion of the patient by applying an electrical stimulation at least proximate to a stimulation site, the location of the stimulation site being based at least in part on a comparison of the second information with the first information.

18. (Previously Presented) A method for treating essential tremor, comprising:

directing the patient to undergo a plurality of muscle actions;

selecting from the plurality of muscle actions a muscle action that produces a selected level of essential tremor motion;

directing a patient to perform the muscle action to produce the selected level of essential tremor motion;

directing information to be collected, the information corresponding to a level of neural activity in the patient's brain while the patient performs the muscle action; and

at least reducing an essential tremor motion of the patient by applying an electrical stimulation at least proximate to a stimulation site, the location of the stimulation site being based at least in part on the information.

19. (Original) A method for treating essential tremor, comprising:

identifying a muscle action subject to essential tremor;

monitoring a first image of the patient's brain function while the patient is not performing the muscle action;

monitoring a second image of the patient's brain function while the patient performs the muscle action;

comparing the first and second images to identify a stimulation site of the brain;

placing at least one electrode at least proximate to the stimulation site;

at least reducing the patient's essential tremor motion by applying an electrical stimulation at least proximate to the stimulation site.

20. (Original) The method of claim 19 wherein comparing the first and second images includes comparing a first image having visual characteristic with a first value at least proximate to the stimulation site with a second image having the visual characteristic with a second value different than the first value at least proximate to the stimulation site.

21. (Original) The method of claim 19 wherein comparing the first and second images includes comparing a first image having a first baseline region and a first activity region corresponding to increased brain activity relative to the first baseline region, with a second image having a second baseline region and a second region corresponding to

increased brain activity relative to the second baseline region, a location of the second activity region being different than a location of the first activity region.

22. (Original) The method of claim 19 wherein comparing the first and second images includes comparing a first image having a first baseline region and a first activity region corresponding to increased brain activity relative to the first baseline region, with a second image having a second baseline region and a second activity region corresponding to increased brain activity relative to the second baseline region, with a brain activity level of the second activity region being different than a brain activity level of the first activity region.

23. (Original) The method of claim 19 wherein identifying a stimulation site includes determining a region of the patient's brain that corresponds to a portion of the image that changes at least one characteristic as the patient performs the muscle action.

24. (Original) The method of claim 19 wherein monitoring the first image includes monitoring a first functional MRI image, and wherein monitoring the second image includes monitoring a second functional MRI image.

25. (Original) The method of claim 19 wherein comparing the first and second images includes:

determining a first region of a first hemisphere of the patient's brain corresponding to a portion of the image that changes at least one characteristic as the patient performs the muscle action; and

determining the stimulation location to include a second region of a second hemisphere of the patient's brain, the second region corresponding functionally to the first region.

26. (Original) A method for treating essential tremor, comprising:

directing a patient to perform a muscle action;

while the patient performs the muscle action, directing a collection of information corresponding to a level of neural activity in the patient's brain;

directing a comparison of a first portion of the information corresponding to a level of neural activity at the left hemisphere of the patient's brain with a second portion of the information corresponding to a level of neural activity at the right hemisphere of the patient's brain; and

at least reducing an essential tremor motion of the patient by applying an electrical stimulation at least proximate to a stimulation site, with a location of the stimulation site being based at least in part on the comparison of the first and second portions of the information.

27. (Original) The method of claim 26 wherein at least reducing an essential tremor motion includes eliminating the essential tremor motion.

28. (Original) The method of claim 26 wherein directing information to be collected includes directing a computer-based routine to collect the information.

29. (Original) The method of claim 26, further comprising directing the formation of an image of at least a portion of the patient's brain, with at least a portion of the image having features representative of the information.

30. (Original) The method of claim 26, further comprising implanting at least one electrode at least proximate to the stimulation site, and wherein applying an electrical stimulation includes applying an electrical signal to the at least one electrode.

31. (Original) The method of claim 26 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having a frequency of from about 5 Hz to about 200 Hz.

32. (Original) The method of claim 26 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having an electrical potential of from about 0.25 volts to about 5.0 volts.

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33. (Original) The method of claim 26 wherein directing the patient to perform a muscle action includes directing the patient to move the muscle.

34. (Original) A method for treating essential tremor, comprising:

directing a patient to perform an action with a first muscle on a first side of the patient's body, the first muscle being controlled by a second hemisphere of the patient's brain;

while the patient performs the action with the first muscle, directing a collection of first information corresponding to a level of neural activity in the patient's brain;

directing the patient to perform an action with a second muscle on a second side of the patient's body, the second muscle mirroring the first muscle and being controlled by a first hemisphere of the patient's brain;

while the patient perform an action with the second muscle, directing a collection of second information corresponding to a level of neural activity in the patient's brain; and

at least reducing an essential tremor motion of the patient by applying an electrical stimulation at least proximate to a stimulation site, with a location of the stimulation site being based at least in part on a comparison of the first information with the second information.

35. (Original) The method of claim 34 wherein at least reducing an essential tremor motion includes eliminating the essential tremor motion.

36. (Original) The method of claim 34 wherein directing information to be collected includes directing a computer-based routine to collect the information.

37. (Original) The method of claim 34, further comprising directing the formation of an image of at least a portion of the patient's brain, with at least a portion of the image having features representative of the information.

38. (Original) The method of claim 34, further comprising implanting at least one electrode at least proximate to the stimulation site, and wherein applying an electrical stimulation includes applying an electrical signal to the at least one electrode.

39. (Original) The method of claim 34 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having a frequency of from about 5 Hz to about 200 Hz.

40. (Original) The method of claim 34 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having an electrical potential of from about 0.25 volts to about 5.0 volts.

41. (Original) The method of claim 34 wherein directing the patient to perform a muscle action includes directing the patient to move the muscle.

42. (Original) A method for treating essential tremor, comprising:

directing a collection of first information corresponding to a level of neural activity in the patient's brain while the patient performs a muscle action;

affecting the patient's motor nerves by introducing a drug into the patient's body;

directing a collection of second information corresponding to a level of neural activity in the patient's brain while the patient performs the muscle action and while the patient is under the influence of the drug; and

at least reducing the patient's essential tremor motion by applying an electrical stimulation at least proximate to a stimulation site, with a location of the stimulation site being based at least in part on the comparison of the first information with the second information.

43. (Original) The method of claim 42 wherein introducing a drug includes introducing ethyl alcohol.

44. (Original) The method of claim 42 wherein at least reducing an essential tremor motion includes eliminating the essential tremor motion.

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45. (Original) The method of claim 42 wherein directing information to be collected includes directing a computer-based routine to collect the information.

46. (Original) The method of claim 42, further comprising directing the formation of an image of at least a portion of the patient's brain, with at least a portion of the image having features representative of the information.

47. (Original) The method of claim 42, further comprising implanting at least one electrode at least proximate to the stimulation site, and wherein applying an electrical stimulation includes applying an electrical signal to the at least one electrode.

48. (Original) The method of claim 42 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having a frequency of from about 5 Hz to about 200 Hz.

49. (Original) The method of claim 42 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having an electrical potential of from about 0.25 volts to about 5.0 volts.

50. (Original) The method of claim 42 wherein directing the patient to perform a muscle action includes directing the patient to move the muscle.

51. (New) The method of claim 15 wherein the information includes second information and wherein applying an electrical stimulation at least proximate to a stimulation site includes applying an electrical stimulation to a stimulation site having a location based on a comparison of the second information with first information, the first information corresponding to a level of neural activity in the patient's brain while the patient does not perform the muscle action.

52. (New) The method of claim 15 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having a frequency of from about 5 Hz to about 200 Hz.

53. (New) The method of claim 15 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having an electrical potential of from about 0.25 volts to about 5.0 volts.

54. (New) The method of claim 17 wherein the information includes second information and wherein applying an electrical stimulation at least proximate to a stimulation site includes applying an electrical stimulation to a stimulation site having a location based on a comparison of the second information with first information, the first information corresponding to a level of neural activity in the patient's brain while the patient does not perform the muscle action.

55. (New) The method of claim 17 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having a frequency of from about 5 Hz to about 200 Hz.

56. (New) The method of claim 17 wherein applying an electrical stimulation includes applying a varying electrical stimulation signal having an electrical potential of from about 0.25 volts to about 5.0 volts.

REMARKS

Claims 2, 3, 6-8, 10, 11, 13, 15, and 17-50 were pending in this application when the present Office Action was mailed (December 28, 2004). Claim 2 has been cancelled and claims 51-56 have been added. Accordingly, claims 3, 6-8, 10, 11, 13, 15 and 17-56 are currently pending.

In the December 28, 2004 Office Action, all the claims were allowed except claim 2 which was rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Published Application No. US2002/0091419 in light of U.S. Patent No. 6,665,562. Without commenting on or conceding the merits of this rejection, and without prejudice to pursuing claim 2 in a continuation or other application, claim 2 has been cancelled from the present application. Claims 51-56 have been added to depend from claims already indicated to be allowable.

In view of the foregoing, the pending claims comply with 35 U.S.C. § 112 and are patentable over the cited art. The applicant accordingly requests reconsideration of the application and a Notice of Allowance. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call John M. Wechkin at (206) 359-3257.

Respectfully submitted,

Perkins Coie LLP

Date: March 22, 2005

John M. Wechkin
Registration No. 42,216

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NOTICE OF ALLOWANCE AND FEE(S) DUE

25096 7590 06/02/2005

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EXAMINER	
LAYNO, CARL HERNANDZ	
ART UNIT	PAPER NUMBER
3762	

DATE MAILED: 06/02/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,898	07/17/2003	Bradford Evan Gliner	33734-8059US	2827

TITLE OF INVENTION: METHODS FOR TREATING ESSENTIAL TREMOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$700	$0	$700	09/02/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 12/04) Approved for use through 04/30/2007.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

or Fax (703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

25096 7590 06/02/2005

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (703) 746-4000, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,898	07/17/2003	Bradford Evan Gliner	33734-8059US	2827

TITLE OF INVENTION: METHODS FOR TREATING ESSENTIAL TREMOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$700	$0	$700	09/02/2005

EXAMINER	ART UNIT	CLASS-SUBCLASS
LAYNO, CARL HERNANDZ	3762	607-045000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

☐ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):

☐ A check in the amount of the fee(s) is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.
NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,898	07/17/2003	Bradford Evan Gliner	33734-8059US	2827

25096 7590 06/02/2005

PERKINS COIE LLP
PATENT-SEA
P.O. BOX 1247
SEATTLE, WA 98111-1247

EXAMINER	
LAYNO, CARL HERNANDZ	
ART UNIT	**PAPER NUMBER**
3762	

DATE MAILED: 06/02/2005

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

PTOL-85 (Rev. 12/04) Approved for use through 04/30/2007.

Notice of Allowability	Application No.	Applicant(s)	
	10/622,898	GLINER ET AL.	
	Examiner Carl H. Layno 5/23/05	Art Unit 3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Paper No.03222005*.

2. ☒ The allowed claim(s) is/are *3,6-8,10,11,13,15 and 17-56*.

3. ☒ The drawings filed on *17 July 2003* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 3/22/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

1. Acknowledgment is made of applicant's amendment which was received by the Office on March 22, 2005.

2. Claims 1, 2, 4, 5, 9, 12, 14, and 16 are canceled. Claims 51-56 have been added. Claims 3, 6-8, 10, 11, 13, 15, and 17-56 are active.

Information Disclosure Statement

3. Acknowledgment is made of applicant's Information Disclosure Statement (PTO-1449) which was received by the Office on March 22, 2005.

Claim Rejections - 35 USC § 103

4. In view of applicant's cancellation of claim 2, the Examiner is withdrawing the 35 U.S.C 103(a) rejection of Firlik et al '419-A1 in view of Gluckman et al '562, which was made against this claim in the last Office action.

Allowable Subject Matter

5. Claims 3, 6-8, 10, 11, 13, 15, and 17-56 allowed.

Reasons for Allowance

6. The following is an examiner's statement of reasons for allowance:

The applicant's independent claims recite details of methods for treating essential tremor in a patient comprising among other steps an initial step of "directing a patient to perform a muscle action" not found in any of the prior art references of record. Although it is well known in the prior art to treat essential tremor in a patient by the use of electrical stimulation of motor nerves (e.g. Cohen et al ''415-A1, cited herein) or portions of the brain which are responsible for motor skills (e.g. transcranial direct current stimulation – tDCS), it is neither shown nor taught in the prior art to "direct" a patient to perform a muscle action in order to glean information useful in controlling electrical stimulation. The prior references appear to invoke muscle movements by pre-stimulation rather than by asking, or directing, a patient to move a muscle (e.g. Cohen et al '415-A1 – paragraph [0034]). Lacking any specific teachings that perform this step, the Examiner deems claims 3, 6-8, 10, 11, 13, 15, and 17-56 to be allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Carl N. Layno

CARL LAYNO
PRIMARY EXAMINER

CHL
5/23/2005

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1

Complete if Known	
Application Number	10/622,898-Conf. #2827
Filing Date	July 17, 2003
First Named Inventor	Bradford E. Gliner
Art Unit	3762
Examiner Name	C. H. Layno
Attorney Docket Number	337348059US

U.S. PATENT DOCUMENTS

CL / SUB.

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
CHL		US-5,314,458	05-24-1994	KHALIL NAJAFI	607/116
CHL		US-6,221,908	04-24-2001	MICHAEL P. KILGARD	514/546
CHL		US-6,405,079	06-11-2002	Mehdi Ansarinia	607/2
CHL		US-6,418,344	07-09-2002	Ali Rezai	607/45
CHL		US-6,499,488	12-31-2002	Mark Hunter	128/899
CHL		US-6,687,525	05-09-2002	Rodolfo Llinas	600/407
CHL		US-6,690,974	06-20-2002	Stephen Archer	607/45
CHL		US-6,795,737-A1	09-21-2004	Gary King	607/117

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
CHL		EP 1 145 736	10-17-2001	Neuropace		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
CHL		DEUSCHL, Gunther, "Essential Tremor," orphanet, December 2003, 4 pgs; http://www.orpha.net/data/patho/GB/uk-essentialtremor.pdf	
CHL		HUMMEL, Friedhelm et al., "Effects of non-invasive cortical stimulation on skilled motor function in chronic stroke," Brain Advance Access, January 5, 2005, pp 1-10, Brain	
CHL		LANG, Nicolas et al., "Preconditioning with Transcranial Direct Current Stimulation Sensitizes the Motor Cortex to Rapid-Rate Transcranial Magnetic Stimulation and Controls the Direction of After-Effects," Biol Psychiatry 2004:56:634-639, 2004 Society of Biological Psychiatry	
CHL		NITSCHE, Michael A. et al., "Level of action of cathodal DC polarisation induced inhibition of the human motor cortex," December 2, 2002, Clinical Neurophysiology 114 (2003) 600-604	
CHL		NITSCHE, Michael A., et al. "Facilitation of Implicit Motor Learning by Weak Transcranial Direct Current Stimulation of the Primary Motor Cortex in the Human," Journal of Cognitive Neuroscience 15:4, pp 619-626, 2003 Massachusetts Institute of Technology	
CHL		PAULUS, W, "Transcranial direct current stimulation (tDCS)", Transcranial Magnetic Stimulation and Transcranial Direct Current Stimulation (Supplements to Clinical Neurophysiology; Vol 56), pp 249-254, 2003 Elsevier Science, B.V.	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] Applicant's unique citation designation number (optional). [2] Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	Carl H. Layno	Date Considered	5/20/05

Notice of References Cited	Application/Control No. 10/622,898	Applicant(s)/Patent Under Reexamination GLINER ET AL.	
	Examiner Carl H. Layno 5/23/05	Art Unit 3762	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
X	A	US-2002/0161415	10-2002	Cohen et al.	607/48
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
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FOREIGN PATENT DOCUMENTS

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	N					
	O					
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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	V	
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	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.